

WHAT IS CLAIMED IS:

1. A plating apparatus comprising:
 - a plating solution vessel filled with a plating solution;
 - an anode electrode provided in said plating solution vessel;
 - 5 a holder for holding a substrate to be treated and immersing said substrate in said plating solution during plating;
 - a cathode electrode provided in said holder, contacting said substrate and serving to apply a voltage to said substrate; and
 - a moving device for controlling a distance between said anode electrode and
 - 10 said substrate in accordance with a thickness of plated film on said substrate.
2. The plating apparatus according to claim 1, wherein said moving device moves said anode electrode so that said distance is smaller as said thickness of plated film on said substrate is greater.
- 15 3. The plating apparatus according to claim 1, wherein said moving device moves said holder so that said distance is smaller as said thickness of plated film on said substrate is greater.
- 20 4. The plating apparatus according to claim 1, wherein said anode electrode has such a shape that a thickness of a central portion is greater than that of a peripheral edge portion.
5. A plating apparatus comprising:
 - 25 a plating solution vessel filled with a plating solution;

- an anode electrode provided in said plating solution vessel;
- a holder for holding a substrate to be treated and immersing said substrate in said plating solution during plating;
- a cathode electrode provided in said holder, contacting said substrate and
- 5 serving to apply a voltage to said substrate; and
- a jet nozzle for blowing off said plating solution upward from a lower part of said plating solution vessel;
- a rectifying plate for controlling a flow of said plating solution blown by said jet nozzle; and
- 10 a rectifying plate moving device for moving said rectifying plate corresponding to a plating situation of said substrate.

6. The plating apparatus according to claim 5, wherein said anode electrode has such a shape that a thickness of a central portion is greater than that of a peripheral edge

15 portion.

7. A plating method of opposing an anode electrode to a substrate to be treated which is provided in contact with a cathode electrode in a plating solution vessel filled with a plating solution, and applying a voltage between said anode electrode and said

20 cathode electrode, thereby plating said substrate, comprising the step of:

changing a spacing between said anode electrode and said substrate which are opposed to each other corresponding to a thickness of plated film on said substrate.